

EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION T-38A, S/N 66-8368 80th FLYING TRAINING WING, SHEPPARD AFB, TX

14 OCTOBER 2003

On 14 October 2003, at 1055 local time, the mishap aircraft (MA), a T-38A, S/N 66-8368, crashed during initial takeoff on Runway 33C at Sheppard AFB, TX. The MA was assigned to the 90th Flying Training Squadron, 80th Flying Training Wing, Sheppard AFB, TX, and was part of the Euro-NATO Joint Jet Pilot Training program. The Mishap Instructor Pilot (MIP) and Mishap Student Pilot (MSP), both from the 80th Operations Support Squadron, ejected safely and sustained no injuries. The MA was destroyed. There was no other significant property damage or injury.

Immediately after liftoff, the MA experienced a series of rolls that increased in magnitude and rate. Liftoff occurred slightly early, at approximately 155 knots. The MA experienced an aerodynamic disturbance (characterized as wing "dips") at bank angles of less than 20 degrees. The sequence continued with a left roll to approximately 30-45 degrees and then a right roll to approximately 40-50 degrees. The MIP came on the controls at that point to try and arrest the rolls by neutralizing the stick with slight forward pressure. The MA rolled again to a left bank of approximately 50-60 degrees and back to the right to 60-70 degrees. At that point, the MIP decided the MA was not responding to his control inputs and he commanded ejection. The MA rolled once again back to the left and the MIP ejected from the aircraft as it was in approximately 45 degrees of left bank. The MSP purposefully delayed ejection to obtain a more favorable aircraft attitude for ejection. The MA rolled back to the right after reaching approximately 90 degrees of left bank. The MSP ejected very shortly after the left wingtip contacted the runway in 35-40 degrees of left bank. The entire sequence occurred at less than 100 feet above ground level. The MA impacted and then departed Runway 33C and came to rest on the departure end of Runway 33L, facing southeast.

The Board could not determine a mishap cause by clear and convincing evidence, however, there was substantial evidence to support two contributing factors: Inexperience of the MSP, and improper transfer of aircraft control between the MSP and the MIP during the mishap sequence.

Due to inexperience, the MSP most likely over-controlled the roll of the MA in response to an aerodynamic disturbance immediately after liftoff. The over-controlling likely continued until the MIP came on the controls and stated, "I have the aircraft." However, the MSP did not hear the MIP's statement and continued to make aileron inputs. The MIP neutralized the stick but never confirmed that the MSP relinquished control, leading to a situation where both pilots were on the controls, neither aware of the other. The MA continued rolling and the MIP perceived that the MA was not responding to his flight control inputs. Given the critical phase of flight and the perception that the MA was uncontrollable, the MIP commanded ejection.

Under 10 U.S.C. 2254(d), any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from an aircraft accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.